

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: April 1, 2005

To: The Commission
(Meeting of April 7, 2005)

From: Delaney L. Hunter, Director
Office of Governmental Affairs (OGA) — Sacramento

Subject: **AB 1380 (Gordon) Telecommunications: new area codes**
As Introduced February 22, 2005

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: Support if Amended

SUMMARY: This bill would add language to the Public Utilities Code, placing specified requirements on how six-month inventory rules for telephone numbers are calculated. The CPUC would be required to adopt rules and orders consistent with the requirements. The bill language is very specific and detailed in defining six month inventory needs, forecast methodology, and timing of donations and returns for numbering resources held by telephone companies.

DIGEST: Existing law gives the Commission regulatory authority over public utilities, including telephone corporations. Existing law places notice and other requirements upon telephone corporations whenever the telephone corporation proposes to establish a new area code. Existing law requires the commission to first implement all reasonable telephone number conservation measures before approving an area code split.

This bill would place specified requirements upon telephone corporations in determining the inventory of numbering resources applicable to telephone corporations that hold dialing codes or thousand-number blocks within rate centers in California and require them to donate excess blocks of numbers to the North American Numbering Plan Administrator within 30 days of the filing of their next scheduled biannual Numbering Resource Utilization/Forest Report. The commission would be required to adopt rules and orders consistent with these requirements.

DIVISION ANALYSIS (TELECOMMUNICATIONS):

Telephone corporations' stockpiling of surplus numbers makes the numbers unavailable to other telephone corporations and may create a perception that an area code is about to exhaust its supply of numbers when numbers are merely being allocated inefficiently. The CPUC has an impressive track record implementing numbering conservation measures and has had great success in preventing new area codes from being introduced prematurely.

The bill sets out an extremely detailed methodology for carriers to use in calculating their six-month inventory needs for telephone number resources. The bill further sets out the methodology to calculate six-month inventories based on demand growth not greater than 15%. The bill further defines six-month inventory needs, forecast methodology, and the timing of donations and returns. This bill requires the CPUC to adopt rules and orders consistent with the requirements in the bill.

The CPUC has actively monitored carriers to assure that they are following the six-month inventory rules set up by the FCC. Codifying the demand growth at a level not to exceed 15% and embedding that percent in legislation may create technical difficulties in the future if demand for numbers change due to new technological developments or other unforeseen circumstances. Amending the language of the bill requiring the CPUC to adopt rules and orders consistent with the spirit of the bill to encourage number conservation but without the prescribed 15% growth in demand would allow the CPUC flexibility in administering number conservation measures and allow for future technological developments.

Program Background

In the mid- and late 1990's, there was an explosion of new area codes in the state of California. The number of area codes nearly doubled, from 13 to 25 in a few short years. It was projected there would be over 40 area codes in California by 2002 unless drastic measures were taken to curtail area code explosion. During the above timeframe, telephone numbers were given out to carriers in blocks of 10,000 numbers.

Since there are only 792 blocks of 10,000 numbers (called NXX codes) in each area code, the newly introduced area codes were "running out of numbers" as new telephone providers received blocks of numbers to provide service to their potential customers. Most carriers only had a few customers in each NXX code and there were literally millions of numbers not in use, yet the available supply of NXX codes was being depleted, requiring additional area codes to be introduced.

The CPUC and the FCC introduced new number conservation measures to address the inefficiencies in the numbering allocation system, including number pooling. The

number conservation measures now in common use require carriers to use numbers in sequence, and to meet usage thresholds before obtaining new numbers.

Number pooling means that numbers are now given to carriers in blocks of 1,000 rather than blocks of 10,000. Telephone companies are required to give back unused telephone numbers to the number pool and can only keep enough additional numbers to satisfy a six month inventory need. The FCC has established requirements limiting carriers' inventory of excess numbers to a six-month inventory but has not established clear rules as to how to calculate the six-month inventory. Carriers are required to submit a report twice a year detailing their numbering inventories to the FCC; this report is called the Numbering Resource Utilization/Forecast Report or NRUF.

The need to create new area codes has been greatly reduced because of the success of the number conservation measures now in place.

RECOMMENDED AMENDMENTS:

Section 7945 (d) (2) should be amended as follows:

“Determine the appropriate growth rate, whereby the maximum growth rate *is to be determined by the CPUC*, to use to calculate the projected growth in telephone numbers for the next six months.”

LEGISLATIVE HISTORY

In 1999, Section 7931 was added to the Public Utilities Code requiring detailed notification to the CPUC, telephone carriers and consumers when a new area code was to be introduced. The first notice requirement began at thirty months for the CPUC, and at twenty-seven months before the new area code was to be introduced for consumers, with additional notice requirements at other intervals for consumers, including one year and three months prior to the introduction of the new area code. In 1999, network technology required such advanced notification to carriers. Today, carriers can implement changes to their switches and network in much less time. While advance notification to consumers is still desirable, the twenty-seven month notice is probably too far in the future given the uncertainties of need and timing for area code changes. The above illustrates the difficulty inherent in specific legislative language and evolving technology.

STATUS:

Set for hearing in Assembly Utilities & Commerce Committee on April 18, 2005

SUPPORT/OPPOSITION

Support: unknown

Opposition: unknown

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BILL LANGUAGE:

BILL NUMBER: AB 1380 INTRODUCED
 BILL TEXT

INTRODUCED BY Assembly Member Gordon
 (Coauthors: Assembly Members Jerome Horton, Karnette, Koretz,
Montanez, Oropeza, Pavley, and Umberg)

FEBRUARY 22, 2005

An act to add Section 7945 to the Public Utilities Code, relating to telecommunications.

LEGISLATIVE COUNSEL'S DIGEST

AB 1380, as introduced, Gordon. Telecommunications: new area codes.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including telephone corporations. Existing law places notice and other requirements upon telephone corporations whenever the telephone corporation proposes to establish a new area code. Existing law requires the commission to first implement all reasonable telephone number conservation measures before approving an area code split.

This bill would place specified requirements upon telephone corporations in determining the inventory of numbering resources applicable to telephone corporations that hold dialing codes or thousand-number blocks within rate centers in California and require them to donate excess blocks of numbers to the North American Numbering Plan Administrator within 30 days of the filing of their next scheduled biannual Numbering Resource Utilization/Forest Report. The commission would be required to adopt rules and orders consistent with these requirements.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following: (a) Although the Federal Communications Commission (FCC) has established requirements limiting telecommunications carriers to a six-month supply of inventory for numbering resources, the FCC has not established any clear and objective method to assure that carriers' actual inventory is, in fact, limited to six-month needs.

(b) Based on actual number utilization experienced by telephone corporations, it is appropriate to establish rules defining six-month inventory needs, forecast methodology, and timing of donations and returns.

(c) Historical experience shows that telephone corporations have repeatedly taken numbers from the pool for stocking their inventories in excess of their actual needs.

(d) Telephone corporations' stockpiles of surplus numbers are not

available to other telephone corporations that may need numbers to serve their own customers.

(e) Telephone corporations' mismanagement of numbers may create a perception that an area code is about to exhaust its supply of numbers when, in reality, available numbers are merely being allocated inefficiently.

(f) Area code splits are costly to governments, consumers, and businesses in the old area code when they are forced to incur costs associated with updating their phone numbers.

(g) Area code splits represent a particular burden to seniors and the disabled community who can face significant challenges associated with an area code number change.

(h) With the implementation of the inventory rules in this act, telephone corporations will still retain the flexibility to increase their inventory to accommodate demand growth of up to 15 percent.

(i) New telephone corporations will not be adversely impacted by this act, but can obtain thousand-blocks used for "footprint" purposes on the same basis as they already do.

(j) Under this act, telephone corporations with a legitimate need for additional telephone numbers will retain flexibility to utilize existing procedures for obtaining telephone numbers as they have in the past.

(k) A 15 percent growth cap provides reasonable discipline in limiting a supplier's inventory of telephone numbers, while preserving flexibility to accommodate customer demand.

(l) The methodology for determining short-term inventory levels adopted by this act is straightforward and involves few mathematical operations that can be readily incorporated into a database from Numbering Resource Utilization/Forecast Reports data.

(m) The establishment of objective guidelines for determining six-month inventory supplies will decrease the volume of stranded telephone numbers, increase available telephone numbers for those carriers truly in need of them, and prevent new area codes from being prematurely opened.

(n) This act is warranted in order to promote the more efficient utilization of telephone numbers. Efficient utilization of telephone numbers will, in turn, help extend the life of area codes and avoid the risk of prematurely opening a new area code to relieve code exhaustion.

SEC. 2. Section 7945 is added to the Public Utilities Code , to read:

7945. (a) This section shall be known and may be cited as the Area Code Conservation and Consumer Protection Act of 2006.

(b) For purposes of this section, "NRUF" means Numbering Resource Utilization/Forecast Reports filed with the North American Numbering Plan Administrator.

(c) A telephone corporation, in determining its six-month inventory levels for each applicable rate center and area code in California, within which the telephone corporation holds numbering resources, shall comply with the requirements of this section.

(d) Code or block holders that have acquired and retained public numbering resources and have filed at least three NRUF Reports with the North American Numbering Plan Administrator shall apply the guidelines in this subdivision in determining the level of numbering resources that they may retain as a six-month inventory. A separate calculation shall be made for each rate center within each area code within which the telephone corporation holds an inventory of telephone numbers, that does all of the following:

(1) Calculate the change in the historical demand for telephone

numbers, which represents the code or block holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2) and the NRUF Report filed 12 months before the most recently filed NRUF Report (NRUF at time 1). The change in the historical demand for telephone numbers consists of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be $((\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 2}) - (\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 1}))/2$.

(2) Determine the appropriate growth rate, whereby the maximum growth rate is 15 percent, to use to calculate the projected growth in telephone numbers for the next six months.

(3) Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.

(4) Find out the excess inventory of telephone numbers. The formula shall be the difference of the available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.

(5) Figure out the short-term inventory level. The formula shall be the difference between the total numbering resources and the excess inventory of telephone numbers.

(d) Code or block holders that have acquired and retained public numbering resources and have filed no more than one or two NRUF Reports with the North American Numbering Plan Administrator, shall apply a modified version of the guidelines set forth in subdivision (d) that recognizes that code or block holders with two or fewer NRUF Reports will not have sufficient historical data to compute 12 months of utilization data changes. Telephone corporations in this category shall utilize data from their most recently filed NRUF report as the basis for prospective inventory calculations that does all the following:

(1) Calculate the change in the historical demand for telephone numbers, which represents the code or block holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2). The change in the historical demand for telephone numbers consists of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be $(\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 2})$.

(2) Determine the appropriate growth rate, whereby the maximum growth rate is 15 percent, to use to calculate the projected growth in telephone numbers for the next six months.

(3) Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.

(4) Derive the excess inventory of telephone numbers. The derivation shall be the difference of the Available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.

(5) Figure out the short-term inventory level. The formula shall be the difference of the total numbering resources and the excess inventory of telephone numbers.

(e) The commission shall require telephone corporations to begin implementing this section with the filing of the next scheduled biannual NRUF report. Telephone corporations shall donate blocks regardless of the source of the numbering resources. This section applies to all NXX code or thousand-block holders, which have acquired and retained public numbering resources. Telephone corporations shall calculate their six-month inventory level

utilizing data in the NRUF Report due on the next scheduled biannual NRUF report and donate any excess inventory blocks to the North American Numbering Plan Administrator based on application of this section. Any surplus blocks identified through the six-month inventory calculations shall be donated to the pool no later than 30 calendar days after their filing of the next scheduled biannual NRUF report. Every six months thereafter, telephone corporations will be required to perform an updated calculation of permissible inventory levels, and to make any resulting donations to the pool of excess inventory blocks as defined by the adopted rules.

(f) The commission may adopt rules and orders consistent with the requirements of this section.